Evaluation of a novel HIV and STD prevention program on adolescent knowledge and behaviors

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Background

A novel education program that merges theater and medicine to reach adolescents with a message of human immunodeficiency virus (HIV) and sexually transmitted disease (STD) prevention.

To appear as peer educators, medical students and actors were selected to deliver dramatic scripts that weave specific educational information into seven different fictitious characters that contracted HIV or an STD as an adolescent. Followed by a candid question and answer session.

*Core educational content integrated into the scripts include: modes of HIV/STD transmission, risk behaviors, casual contact, the importance of being tested, protected sexual behavior and abstinence.*

Research Objectives

The study objectives were to assess whether participation in the program was associated with

1. increased knowledge and knowledge retention regarding HIV/STD transmission prevention
2. a reduction (or delay in intention to participate) in high risk sexual transmission behaviors.

Methods

Subjects

Three hundred 8th grade students from an urban school scheduled to participate in the education program were asked to volunteer for the study.

Surveys

Three written surveys with identical items were administered at baseline (BL), immediately following the program (post), and 2 weeks later. Surveys were completed anonymously.

Demographics:: Age, grade, ethnicity, sex

Knowledge:

12 true/false items, examples:
- Not having sex is one way to avoid getting HIV?
- HIV treatment is expensive and has many side effects?
- Can you get an STD from oral sex?

Sexual Risk Behavior and Intentions:

Ever had sex (oral, anal, or vaginal)- yes or no

More than one sex partner this year

Will not have sex until I get married

Will use a condom if have sex

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Results

- Demographics
  - 236 participants completed the initial BL survey
  - Mean age, years: 13.0±0.50
  - 56.3% were male
  - 73.5% were Caucasian, 7.7% were African American, and 6.4% were Hispanic/Latino.

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Discussion

- This data suggests that the innovative HIV and STD prevention program is an effective means of increasing and maintaining adolescent knowledge regarding HIV and STDs. Although participants did not report a decreased intention to engage in high risk sexual behaviors, this may be due to the many other environmental factors that impact risk behavior not controlled for in this study, for instance lack of insurance or ability to pay, lack of transportation, lack of access to condoms or to HIV/STD testing centers and concerns about confidentiality.

Why does it matter?

- According to the United States Centers for Disease Control and Prevention:
  - Young persons, aged 15-24 years represent only 25% of the sexually active population; however, they acquire nearly half of all new STDs.
  - In 2009, as with previous years, women aged 15-19 years had the highest rate of chlamydia and gonorrhea compared with any other age or sex group.
  - From 2008 to 2009, the rate of chlamydia in men, ages 15-19 years, increased 5.9% from 700.3 cases per 100,000 to 735.5 cases per 100,000.
  - In 2006, an estimated 5,259 young people, aged 13-24, in the 33 states reporting to CDC were diagnosed with HIV/AIDS, representing about 14% of the persons diagnosed that year.

Conclusions

- This program has shown to be an effective and valuable means of increasing and maintaining adolescent knowledge regarding HIV and STDs.
- As HIV and STDs prove to be a relevant issue in adolescent lives, strong efforts to minimize their risk for contracting HIV or STDs must be made available. Concerns for proper education and funding for such novel educational programs such as the one studied above, remains an issue of utmost importance.
- This study calls for educational programs that follow the ever changing adolescent culture and match it with creative and innovative programs in order to reach and protect its members.

Limitations

1. Limited generalizability: a specific age group and population was targeted in this study
2. Although efforts were made to keep survey questions neutral and unbiased.
3. Self-report method of data collection can cause issues with intentional deception, poor recall, or misunderstood questions

References
